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Measuring Educational Progress in the South: Student Achievement

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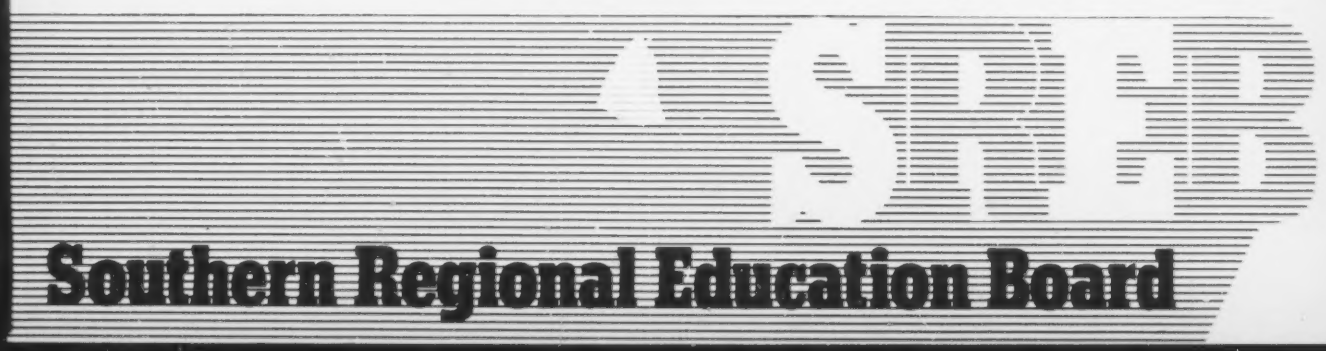


Foreword

The South has established itself as a leader in efforts to improve educational quality. Now it must be the leader in measuring educational progress. The region's first challenge is to sustain and increase the momentum for improving education; the second, to make certain that public officials and educational leaders know, and can demonstrate to the public, the results of quality improvement efforts.

Governor Lamar Alexander of Tennessee, 1983-84 chairman of the Southern Regional Education Board, has called for "the South to be the leader in measuring educational progress." Political leaders who have sponsored educational reforms, and the tax dollars to underwrite them, agree overwhelmingly on one point–educational progress must be evaluated if public support is to be maintained for long-term educational improvement.

SREB's work to promote assessment of educational progress is based on four general principles. First, progress at one level is linked to the next. Therefore, we must evaluate various levels to get an accurate picture. Second, any assessment of educational progress must emphasize the primary importance of student learning. Other outcomes are important, but none more so than student achievement. We must, in short, give more attention to monitoring, measuring, and evaluating student learning. Third, assessment of progress should also determine whether the resources pledged to reforms are adequate to meet the goals. Finally, educational progress must be measured in terms of participation and access. Policies which merely exclude students as a way of improving measured levels of achievement of a group do not promote educational progress or serve the public interest.

Discussions by SREB's Executive Committee and the Commission for Educational Quality have underscored the importance of the emphasis on student achievement and have led to this initial educational progress report focusing on student achievement.

The extent of assessment of student achievement in the region's schools is impressive. Recent and proposed actions by state legislatures and boards of education will further increase this. The results are also encouraging, especially those which reflect increased ability by elementary students to handle specific tasks or demonstrate skills. It will be important in 1984 and 1985 for states to make certain that their attention to, and investment in, assessing student achievement is in line with their efforts to improve educational quality.

A missing link in assessing student achievement in the schools is the existence of publicly accepted, nationwide measures by which states can gauge their relative progress. No state in the country knows how its students' achievement compares with that of other states. "National" comparisons which states can make today lose much of their public credibility and importance, as the limitations of these measures are explained. Educational and public leaders have a new, and perhaps rare, opportunity to deal with this missing link and establish a state-based nationwide assessment of student achievement. A 1984-85 SREB pilot project with the National Assessment of Educational

Progress and interested states could demonstrate the value and feasibility of a state-based national assessment and further the likelihood of a proposed nationwide program in 1985-86. The pilot project is outlined in this report. Details and an invitation to participate have been shared with officials in SREB states.

The emphasis on assessing student achievement is not as widespread in higher education as in the schools, but it is increasing. And, in fact, the results of college-level assessments have quite a direct impact on students. For example, many thousands of students will take rising junior examinations next year which can determine whether they will graduate. Thousands of others will have to meet new examination requirements to enter certain programs or to be licensed in a profession. Institutions are finding that approval for some programs, and the dollars to support them, are being linked to the achievement of students in these programs. These developments suggest that the questions being raised today about basic academic skills of college students are likely to grow in volume in the future. A new openness about these questions and new responses by higher education will be required. This report outlines some of the responses to date and reinforces several suggestions for additional actions.

The staff of state departments of education and state higher education agencies provided much of the following information describing assessment programs in Southern schools and colleges. Their assistance and cooperation are greatly appreciated.

The South can be a leader in making and measuring educational progress. By the most important measure of that progress–student achievement–the South is still behind today. Some will argue that because of the region's comparatively low income levels and the proportion of students from disadvantaged backgrounds, Southern states can't be judged by standards beyond their borders. Economic and demographic facts must be understood, particularly by those who seek instant results. But these facts should not deter us from mainstream efforts to assess student achievement.

This report cites a challenge issued more than two decades ago to the South by the SREB Commission on Goals for Higher Education. It bears repeating. Education in the South must "be measured against the same criteria of excellence which are applied everywhere." This belief is at the base of SREB's work on measuring educational progress, including this report on student achievement.

SREB staff members who have prepared this report are Lynn Cornett, Joseph Marks, Mark Musick, and E. F. Schietinger. The consultative assistance of Thomas Fisher of the Florida Department of Education is gratefully acknowledged.

Winfred L. Godwin
President

Measuring Student Achievement in Southern Schools

The Southern Regional Education Board's 1981 report, *The Need for Quality,* advised that "the region's immediate challenge is to implement minimum standards across the board, and the region should seek to achieve, during the Eighties, substantial improvement of academic standards above those minimum expectations."

On the first challenge–to advance minimum standards–the actions have been impressive. New standards for high school graduation will be in place in nearly every SREB state by this fall–high school students will be taking more courses, and more demanding ones, to graduate. The time spent on instruction in schools has been increased in many states through longer school days, lengthened school years, and tougher restrictions on extracurricular activities. College admission standards have been raised, sending a clearer message to high school students preparing for postsecondary education. Minimum competency tests are documenting achievement and are helping in efforts to raise basic skills of marginal students. Half of the SREB states now require students to pass a minimum competency test for high school graduation. The list goes on, but is is clear that minimum standards are being implemented across the board.

On the second challenge–to improve academic performance beyond minimum expectations–there are also many encouraging efforts. Special diplomas and awards for high school students who complete especially challenging course schedules are either in place or under consideration in nearly every SREB state. States and school districts are promoting the College Board's Advanced Placement program, which accelerates high school students into college-level work. Joint enrollment programs enabling high school students to take college courses at nearby campuses are becoming more than an experimental oddity. States are establishing new academic scholarship programs for outstanding high school students. These tangible actions show real progress in raising expectations.

Will these minimum standards and raised expectations make a significant difference in student achievement? How will we know? Will present assessments of student achievement give state education and political leaders the information they need to modify educational programs and sustain public and financial support for educational improvement? How are students in a given state doing, compared with those in the nation and in neighboring states? Are states and the region as a whole making progress?

Most of these are questions which each state will need to answer independently. But, if states are to know how the achievement of their students compares with that in other states and the nation, joint action by state leaders will be required.

Political leaders who have sponsored educational reform legislation and increased appropriations, or taxes, to underwrite improvements are among the first to ask these questions. Most are insisting that student performance and educational progress must be assessed if public support is to be sustained for a long-term effort to improve education. Some are already pointing out that states must be able to begin answering these questions in two or three years.

As state leaders ask themselves the most basic of these questions–"Will our reforms make a difference, and will we know?"–the obvious first step is to review current student assessment programs and the information they provide. SREB has attempted to highlight the key features of the existing state student assessment programs, based on information from the state departments of education, and to offer suggestions about the future needs for student assessment.

State student assessment programs involve two types of testing. *Norm-referenced tests* are ones in which students are compared, not according to a predetermined standard of correct answers, but, instead, to the performance of other groups of students. Most often this is a so-called "national" group of students who take the same test under comparable conditions. These tests produce comparisons with external norms or averages. *Criterion-referenced tests* judge how well students perform, based on predetermined standards. These tests are intended to disclose what students know about a given subject in terms of the skills or competencies determined to be appropriate for a given age or grade level. The minimum competency tests for high school graduation are an example of criterion-referenced tests.

Reports from state departments of education on norm-referenced testing programs show that, over the past five years, Southern states have generally increased their standing in reference to a "national norm," whether that norm is reported as a grade equivalent score or as a percentile ranking, with the 50th percentile (the median) representing the "national norm."

The results for the 1982-83 tests across the SREB region show that in the eleven states which have some type of norm-referenced testing program, the elementary students in nine of the states fall at or above the national average in reading and mathematics. In the upper grades (eighth and above), six states are at or above the national average in reading; six are at or above the national average in mathematics.

Many of these results are encouraging. They reflect real improvements. However, being at the "national norm" does not necessarily mean that students are performing at desired levels of achievement; it simply means that students are performing at the median for students in a "national" group that was used as a norm population. Because students in the norm population must come from districts which volunteer their students, the group may not be as representative of the nation as would be desired. States using different nationally-normed tests find that percentile rankings of the same group of students on different tests may vary a great deal from test to test. Secondly, because of expense, national norms may be updated only once or twice a decade, so a lack of timeliness may exist when comparisons are made. Students taking a test in 1983 may be compared to a national group of students who took the test in 1978, or earlier.

Several SREB states use a nationally-normed test for which the norm was established in 1977. The latest results indicate significant improvement based on that benchmark. However, large fluctuations in scores may occur when new tests are used or "national norms" are updated. Abrupt changes in reported achievement scores raise serious questions in the minds of the public about the credibility of the tests as well as the meaning of being at or above a "national norm."

The value of these tests in demonstrating progress relative to one national standard is lessened by the fact that only four SREB states use the same nationally-normed tests–and states may use different forms of the same test. Thus, for all practical purposes, states that use different nationally-normed tests are not comparing their students on the same national scale, and comparisons cannot be made from state to state.

The most valid national comparisons that exist for the region may be those provided by the National Assessment of Educational Progress (NAEP). NAEP was initiated and funded by the U.S. Office of Education to gather and report information about educational achievement and attitudes of students in the nation. The tests have been administered periodically over the past 15 years in subjects such as mathematics, reading, and science. Samples of students at three age levels–9, 13, and 17–are chosen to be representative of the nation as a whole. Information is provided by subgroups, such as sex, race, region of the country, and type of community. The NAEP Southeastern region is comprised of 12 of the SREB states; Maryland and Texas are in other NAEP regions. Thus, the NAEP's Southeastern results give a general indication of progress across most of the region. NAEP has never provided specific state-based information or comparisons among states, but there is growing interest in adding the capability of providing state-by-state information.

Information from the 1983-84 National Assessment of Educational Progress will be available this summer and fall. Historically, the NAEP information has shown the Southeastern region as significantly below the national average on all sets of mathematics and science assessments at the three age levels tested (9, 13, and 17). On reading assessment for 9-year-olds, the gap between the Southeastern region and the nation has been substantially reduced; 13- and 17-year-olds have scored significantly below the nation, but the gap has narrowed, compared with earlier assessments.

There is considerable interest in being able to measure educational progress, and in particular, to gauge how students in a state are progressing compared to their peers in other states and the nation at large. This interest, and the possibility that the National Assessment of Educational Progress program could be designed to provide valid state-based information, have sparked discussions in several educational and political circles, and action by the Southern Regional Education Board. SREB will be sponsoring a pilot testing program in 1984-85 with interested SREB states. This will enable these states to compare their students' achievement with the results of the National Assessment and with other participating states. One consequence of such an effort would be to help build experience and support for a state-based national assessment program in which all states could participate, possibly beginning in 1985-86.

An SREB pilot program would provide state benchmark data as well as national comparisons on reading achievement for eleventh grade students. This data would provide a credible starting point by which states could begin to measure the cumulative effect of their educational improvement efforts. Currently, neither the minimum competency high school graduation tests, the Scholastic Aptitude Tests (SAT) and the American College Tests (ACT), nor norm-referenced tests give states a common comparison of achievement to a national standard for all students.

An examination of the criterion-referenced testing programs in the Southern states tells a great deal about how students are performing on predetermined standards or objectives. Criterion-referenced test results are used predominantly for diagnosis of individual student strengths and weaknesses. In addition, they provide information about groups of students. Group scores are generally reported as the percentage of students mastering a particular competency or the percentage of students meeting a predetermined objective. (For instance, a high school graduation test may require that a student answer correctly 70 percent of the questions to pass.) An examination of the reports of the criterion-referenced programs shows that students are generally mastering more subject matter at all levels during each subsequent year of testing. However, a greater percentage of students in lower grades meet state standards than do students at the upper grade levels.

The criterion-referenced tests also show that on higher-order or more complex skills, students' performance is less than would be desired. The following are examples of how students perform: 41 percent of the ninth-graders in one state cannot master the conversion of fractions to decimals; in other states, 62 percent of the sixth-graders have difficulty identifying main ideas in a reading passage, 61 percent of the fifth-graders cannot discern fact from opinion in a reading passage, 48 percent of the eighth-graders do not know how to solve personal financial problems. The highest percents of "mastery" occur on more elementary skills, such as spelling, adding whole numbers, multiplying whole numbers, and following written directions.

The high school graduation examinations required in seven SREB states are criterion-referenced tests designed to measure minimum competencies. The passing rates for students taking the tests for the first time indicate that, in most states, between 93 and 99 percent of the students pass the reading test; in mathematics, the rates are close to 90 percent. Most states report that 98 to 99 percent of the high school students pass the tests by the end of their senior year. For the large number of students who pass these minimum competency tests with ease, there is no indication of the actual level of achievement. The expansion of minimum competency testing programs to include a greater range of skills would be necessary to measure achievement levels of all students. Resources would have to be made available to allow states to do this. Results of the high school graduation tests substantiate the claim that, each year, more and more students are able to perform at the minimum levels which states have set. State departments of education indicate that improved test-taking skills and "teaching to the material" covered in the tests are two important reasons for this improved performance on the criterion-referenced tests.

Conclusions

The results of the NAEP assessments and the state testing programs indicate that some progress has been made in recent years–the achievement level of students in the South is higher now than in past years. Programs to address basic skill deficiencies of students, especially in the elementary grades, as well as the emphasis on minimum standards for students, may be reasons for the increase in achievement.

The criterion-referenced testing programs that states are using will continue to provide specific information for addressing individual student weaknesses, as well as to monitor progress on state standards and goals. Nationally-normed tests will continue to provide states with the availability of comparative data for all grade levels and subject areas, especially information which is closely tied to particular curriculum objectives.

The best way for states to measure student achievement gains in relation to other states or with one national group will be through the National Assessment of Educational Progress. An SREB pilot program during 1984-85 with interested SREB states can provide statewide data as well as national comparisons on reading achievement for eleventh-grade students. This program may be an important forerunner of a state-based nationwide assessment program, which is currently being considered.

Multiple sources of information will be needed to assess how the reforms being implemented in the region are affecting the progress of students, especially beyond minimum standards. Many observers, especially political leaders in the region, believe that student achievement should be a greater factor in the standards used for accreditation. As states seek to raise educational quality, the emphasis on student achievement and outcomes must be a part of the accreditation standards, which historically have dealt almost solely with input and process. Some input measures will remain vitally important, particularly those that reflect whether or not adequate resources are being made available for appropriate programs to be set in place and to continue. Furthermore, educational progress must be measured in terms of participation and access. Policies which merely exclude students as a way of improving the measured level of achievement of a group cannot be viewed as promoting educational progress.

In spite of the accomplishments to date, the South still lags behind the rest of the nation in student achievement, and this fact cannot be ignored as states seek to sustain their quality improvement programs in coming years. Another fact which cannot be ignored is that the South has a disproportionately large number of students from disadvantaged backgrounds. Those who are studying educational reforms must consider this fact when interpreting student achievement results on state and national measures. But this cannot become an alibi or a reason for lowering expectations. More than two decades ago, the SREB Commission on Goals for Higher Education insisted that education in the South "be measured against the same criteria of excellence which are applied everywhere." Today's educational and political leaders must insist on no less for the decades ahead–the South must be measured against the same criteria of excellence which are applied everywhere.

Profiles of State Student Assessment Programs

Alabama

The state of Alabama has a three-part testing program which includes state criterion-referenced tests, nationally-normed tests, and a minimum competency test for high school graduation.

State-Developed Criterion-Referenced Tests

Alabama Basic Competency Test

Mandate: State Board of Education, 1977
Purpose: Minimum competence as well as design of the curriculum
Subjects: Reading, mathematics, language, writing (for local grading only)
Grades: 3, 6, 9 (All students)*

Results for 1982-83:

Alabama Basic Competency Tests

All scores are reported in terms of percentage of students mastering a particular competency.

Grade 3

Reading	Mast ·ry levels of the students ranged from 61 (using maps and making inferences) to 98 percent (word recognition).
Language	Mastery ranged from 60 to 97 percent of the students; punctuation was the most difficult category, identification of singular and plural nouns the easiest.
Mathematics	Mastery ranged from 61 to 95 percent; subtraction and division were the most difficult competencies, reading graphs the easiest.

Grade 6

Reading	Mastery ranged from 72 to 97 percent; discerning fact from opinion was the most difficult, contractions and following directions the easiest.
Language	Mastery ranged from 73 to 94 percent; using commas was the most difficult competency, spelling the easiest.
Mathematics	Mastery ranged from 54 to 96 percent for each competency. Most difficulties were encountered with simple fractions and decimals, as well as reading rulers. Reading and writing money values were the easiest.

Grade 9

Reading	77 to 95 percent of the students mastered the competencies. Survival words and library skills were mastered by the smallest number of students; following directions by the most.
Language	Mastery ranged from 61 percent on spelling to 96 percent on pronoun and antecedent agreement.
Mathematics	41 percent of the students mastered applications of decimals and fractions, only 42 percent were able to measure the perimeter or area of rectangles; 90 percent of the students mastered reading and writing amounts of money.

*"All students" (here and in the following profiles) indicates testing of the total population of students for whom the tests are appropriate.

Alabama High School Graduation Examination

Mandate: State Board of Education, 1977
Purpose: Award high school diploma beginning with the class of 1985
Subjects: Minimum competence in reading, language, mathematics
Grades: Students have two chances in the 11th grade and two in the 12th to pass the graduation test (All students)

Results from the October, 1983 test data:
(first time the graduating class of 1985 was tested)

Reading — 94 percent passed, 5 percent failed, 1 percent did not take the test. The percentage of students mastering the various competencies ranged from 88 percent on book sections to 98 percent on abbreviations.

Language — 87 percent passed, 13 percent failed, less than 1 percent did not take the test. The range of mastery was from 67 percent on the proper format of business letters to 98 percent on pronoun-antecedent agreement.

Mathematics — 89 percent passed, 10 percent failed, 1 percent did not take the test. 53 percent of the students mastered the competency which dealt with finding rectangular areas; 98 percent could read and write money values and numbers.

Nationally-Normed Tests

California Achievement Tests
(1977 Edition, Forms 12C, 14C, 15C, 18C, 19C)

Mandate: State Board of Education
Purpose: National comparisons as well as curriculum decisions
Subjects: Reading, mathematics, English, spelling and reference skills
Grades: 2, 4, 5, 8, 10 (All students)

Results for 1982-83:

California Achievement Tests

All results are reported in grade levels; the national average is the grade level plus 7 months (for example, 3.7 represents the third grade, 7th month)

	Grade 2	*Grade 4*	*Grade 5*	*Grade 8*	*Grade 10*
Reading	3.0	4.8	6.1	9.0	10.6
Spelling	3.4	5.7	6.9	9.5	11.5
Language	3.2	5.7	6.9	10.2	11.8
Mathematics	3.2	5.1	6.2	9.4	11.2
Total	3.1	5.1	6.2	9.3	11.0

Trends in Student Achievement

According to the State Department of Education, the data available for the past five years on the California Achievement Tests indicate that the trend is upward. In 1978-79, of the 12 grades tested, grades 1 through 5 reached the national average. By 1982-83, when five grades (2,4,5,8,10) were tested, all grades had reached the national average and improved over the previous years.

Total Battery Scores on the California Achievement Tests

(National average is grade level plus .7)

Grade:	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*
1978-79	1.8	2.9	3.7	4.8	5.7	6.6	7.4	8.4	9.2	10.0	10.9
1979-80	1.7	2.9	3.8	4.8	5.9	6.9	–	8.7	–	–	–
1980-81	1.8	3.0	–	5.0	6.1	–	7.9	8.9	–	10.5	11.2
1981-82	1.8	3.0	–	4.9	6.1	–	8.0	9.0	–	10.5	11.6
1982-83	–	3.1	–	5.1	6.2	–	–	9.3	–	11.0	–

Arkansas

The state of Arkansas employs norm-referenced tests at the elementary and secondary levels as well as criterion-referenced tests in reading and mathematics at three grades. The additional areas of social studies, science, and language arts will be added during subsequent testing years, due to the Competency-Based Assessment Act of 1983. Beginning in 1985-86, academic skills plans to insure remediation must be developed for students in the third and sixth grades who fail to achieve mastery. Beginning with the 1987-88 testing, eighth grade students who do not achieve mastery will not be promoted to the ninth grade. Several opportunities to retake the test will be given.

State-Developed Criterion-Referenced Tests

Minimum Performance Tests

Mandate: Legislative
Purpose: Diagnostic information; beginning 1987-88, promotion to ninth grade
Subjects: Reading, mathematics
Grades: 3,6,8 (All students)

Results for 1982-83:

Minimum Performance Tests

Scores are reported as percentage of students mastering objective; 70 percent has been chosen as an arbitrary goal of mastery of basic skills on a statewide basis.

Grade 3

Reading	The percentage of students mastering the objectives ranged from 38 percent on attaching meaning to suffixes to 98 percent on recognizing basic vocabulary words. (70 percent achieved mastery on 21 of 24 objectives.)
Mathematics	Scores ranged from 59 percent of the students mastering the ability to check subtraction by adding, to 67 percent telling time to the nearest 5 minutes, and to 96 percent being able to count objects or groups of objects. (70 percent achieved mastery on 16 of 19 objectives.)

Grade 6

Reading	60 percent of the students were able to expand vocabulary by the use of homonyms and use outlining as a study aid; 98 percent could locate information in a telephone directory. (23 of 29 objectives were mastered by 70 percent of the students.)
Mathematics	Less than half (47 percent) of the students could identify quadrilaterals, but 95 percent could do simple division; 93 percent could add 5-digit numbers with regrouping. (14 of 18 objectives were mastered by 70 percent of the students.)

Grade 8

Reading	49 percent of the students could recognize types of literature, while 96 percent could distinguish reality from fantasy in reading passages. (70 percent mastered 16 of 22 objectives.)
Mathematics	Ranges were from 43 percent on converting units of measure to 94 percent on adding whole numbers. (70 percent of students mastered 20 of 30 objectives.)

Nationally-Normed Tests

Science Research Associates (SRA) Achievement Series

(1978 Edition, Form 1)

Mandate: Legislative
Purpose: National comparisons at the state and local levels
Subjects: Reading, mathematics, language arts
Grades: 4, 7, 10 (All students)

Results for 1982-83:

Science Research Associates Achievemcnt Series
(All scores are reported in percentile ranks)

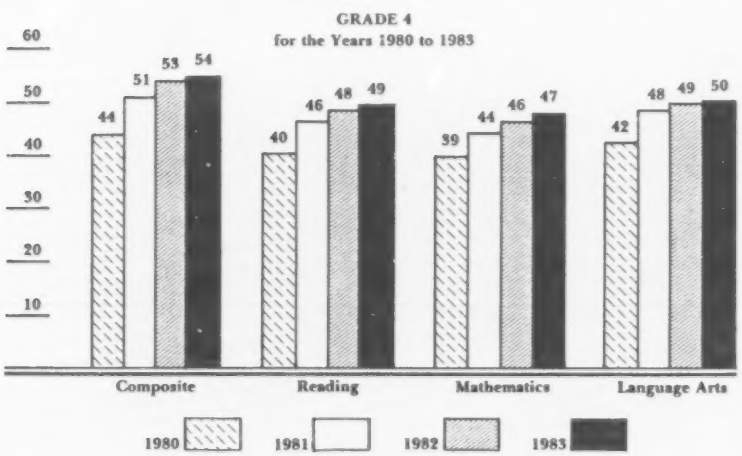
	Grade 4	*Grade 7*	*Grade 10*
Reading	49	48	44
Mathematics	47	52	52
Language Arts	50	53	46
Composite	54	54	44

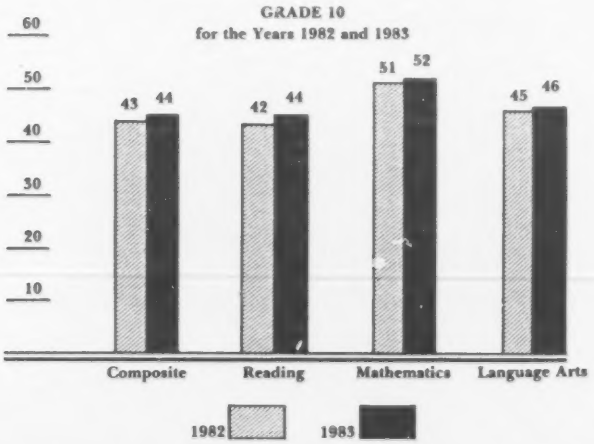
Trends in Educational Achievement

According to the Department of Education, a trend for gradual but steady improvement in basic skills achievement by Arkansas students compared to students nationwide continued in the 1982-83 school year. (See figure for grade 4 and grade 10 trends on the SRA.) Also, steady improvement continues in mastery of the state's own goals for achievement in basic skills.

The Minimum Performance Test, developed by a committee of Arkansas teachers, was field-tested for two years on a sample of students in grades three, six, and eight before being given to all students in those grades in 1982 and again in 1983. Comparing 1982 and 1983 results on the state Minimum Performance Tests shows that, overall, student performance in 1983 improved slightly from 1982 in the terms of the number of objectives mastered by 70 percent or more of the students tested.

Arkansas Percentile Scores on the
Science Research Associates Achievement Series
(Mean Percentile Ranks)





Florida

The Florida testing program consists of state-developed tests for elementary and secondary students.

State-Developed Criterion-Referenced Tests

State Student Assessment Test of Basic Skills (SSAT-I)

Mandate: Legislative, 1971, 1976
Purpose: Provide information for student promotions; state-level and district-level data to be used for assessing how well districts and schools are meeting standards; identification of educational needs
Subjects: Reading, writing, mathematics; test of Economic Understanding
Grades: 3, 5, 8, 10 (All students) Economic Understanding Test (sample, grades 5, 8, and 10)

Results for 1983:

SSAT-I Scores

	Grade 3	*Grade 5*	*Grade 8*	*Grade 10*
	Average Percent Mastery Across All Performance Standards			
Reading	92	89	88	88
Writing	96	92	93	86
Mathematics	92	87	87	85
	Percentage of Students Mastering at Least Three-Fourths of the Minimum Performance Standards			
Reading	86	82	80	77
Writing	90	75	90	57
Mathematics	83	80	75	76

Grades 3,5,8 – October 1983; grade 10 – March 1983

State Student Assessment Test of Basic Skills (SSAT-II)

Mandate: Legislative, 1971, 1976
Purpose: High school graduation
Subjects: Reading, writing, mathematics
Grades: First administered in 10, can be repeated in 11, 12 (All regular high school students and students completing diplomas through an adult high school program)

March 1983 Results:

SSAT-II Scores

Percentage of Students in Grade 10 Passing the SSAT-II on First Try

Communication skill (reading, writing)	95
Mathematics	78
Both Sections	77

Trends in Educational Achievement

According to the Florida Department of Education, the most significant increases in performance on the SSAT-I and SSAT-II occurred between 1977 and 1979. Both tests were administered in October of 1977, one year after the passage of the 1976 Accountability Act. This Act specified that performance on these two tests would be a high school diploma requirement in 1979. The 64 percent performance (mathematics) on the SSAT-II in 1977 jumped to 78 percent in 1979, where it has remained for the past five years. The communication skill performance went from 92 percent to 98 percent and then dropped

back to 95 percent when the test administration dates were changed from October of the eleventh grade to March of the tenth grade. The Department of Education indicates that the lack of increase in the mathematics scores since 1978 and in the communication skill scores since 1981 may be due, in part, because requirement of passing the test for high school graduation was postponed due to the *Debra P. vs. Turlington* court case. Some of the impetus for improvement may have been lost during the three-year period of litigation.

The following tables show the percentage of students mastering the minimum performance standards for the last five years:

Minimum Performance Standards (SSAT-I)

	Reading	*Writing*	*Mathematics*
	GRADE 3		
1979	85	90	87
1980	86	90	87
1981	89	92	90
1982	91	95	90
1983	92	96	92
	GRADE 5		
1979	82	83	81
1980	85	86	81
1981	87	87	85
1982	90	90	86
1983	89	92	87
	GRADE 8		
1979	79	85	79
1980	83	86	80
1981	85	88	82
1982	88	92	85
1983	88	93	87
	GRADE 10 or 11		
1979	85[a]	80[a]	82[a]
1980	88[a]	81[a]	80[a]
1981	89[a]	84[a]	85[b]
1982	89[b]	84[b]	81[b]
1983	88[b]	86[b]	85[b]

[a]Eleventh grade administration
[b]Tenth grade administration

Percentage of Students Passing the SSAT-II on First Try

GRADE 10 or 11

	Communication	*Mathematics*
1979	97[a]	78[a]
1980	98[a]	78[a]
1981	95[b]	78[b]
1982	95[b]	78[b]
1983	95[b]	78[b]

[a]Eleventh grade administration
[b]Tenth grade administration

Georgia

The testing program in Georgia includes criterion-referenced testing in grades four and eight as well as the administration of nationally-normed tests to a sample of students in the state. Changes in the current program include requiring the criterion-referenced tests (which are optional now) in grade 1 (in 1983-84) and in grades 3 and 6 (in 1985-86). The required test for grade 4 will become optional. In the 1985-86 school year, third-graders must pass the test before entering the fourth grade. The Basic Skills Test for high school students will be expanded to include writing in the fall of 1986; this will be a full scale pilot administration. In the fall of 1987, students taking the Basic Skills Test must pass the writing as well as reading and mathematics tests as a part of graduation requirements.

State-Developed Criterion-Referenced Tests

Criterion-Referenced Tests

Mandate: Georgia Board of Education, 1973
Purpose: Identify individual weaknesses; identify strengths and weaknesses of certain groups; select curriculum materials; report to parents
Subjects: Reading, mathematics, career development
Grades: 4, 8 (All students)

Spring 1983 Results:

Criterion-Referenced Tests
(Percentage of Students Achieving Skill)

Grade 4

Reading	Percents range from 74 on study skills to 94 on vocabulary.
Mathematics	Percentage of students achieving skills range from 75 percent on geometry and measurements to 88 percent on relations and functions.
Career Development	Ranges were from 69 percent on knowledge of relation of education to work to 76 percent on self-understanding.

Grade 8

Reading	59 percent of students mastered skill of literal understanding, with 70 percent achieving the skill of inferential understanding of written passages.
Mathematics	69 percent achieved the skill of understanding mathematics terms and relationships, while 78 percent could do computations.
Career Development	70 percent achieved skill on knowledge of work and occupations, with 78 percent achievement on the relationship of education and work.

Basic Skills Test

Mandate: Georgia Board of Education, 1980
Purpose: Minimum competency for high school graduation (class of 1985)
Subjects: Reading, mathematics
Grades: 10 (11 and 12 for those not passing the test) (All students)

Spring 1983 Results:

Basic Skills Test
(Grade 10)
Percentage of Non-handicapped Students Passing

	Fall 1982	Spring 1983	Total in the Two Administrations
Reading	93	5.5	98.5
Mathematics	87	7	94

Nationally-Normed Tests

Iowa Test of Basic Skills (ITBS)
(1978-79 Edition, Form 7)

Tests of Academic Progress (TAP)
(1978 Edition, Form T)

Mandate:	Georgia Board of Education
Purpose:	Provide information for educational planning
Subjects:	(ITBS) – Vocabulary, reading, language, work study, mathematics (TAP) – Composition, reading, mathematics
Grades:	(ITBS) – 4, 8; (TAP) – 10
Population:	All non-handicapped students (a set of questions from the tests are administered so that all items are answered by a representative sample of Georgia students)

Spring 1983 Results:

Iowa Tests of Basic Skills (ITBS)

(Reported as median grade equivalents; national norms are 4.8 and 8.7)

	Grade 4	*Grade 8*
Vocabulary	4.4	8.2
Reading	4.8	8.8
Language	4.5	7.9
Work Study*	5.1	9.4
Mathematics	5.0	9.1
Total	4.8	8.7

*Work Study – Skills which involve using visual and reference materials

Tests of Academic Progress (TAP)

(Reported as median grade equivalents; Grade 10 national norms are 10.2)

Composition	11.0
Reading	10.4
Mathematics	10.7
Using Information	10.8
Total	10.7

Trends in Student Achievement

The overall trend in student achievement data at the fourth and eighth grades has shown a steady growth pattern during the last five years of testing. The results of the norm-referenced testing at grade 10 show a marked increase over the expected results, according to the Department of Education. The Department attributes the improvement to influence of the newly-adopted high school Basic Skills Test as a requirement for graduation. Also, to insure that all students are prepared to meet the new graduation requirement, school programs have been implemented to address deficiencies of students.

Kentucky

The Kentucky Department of Education operates two types of testing programs. The first is a mandated testing program which allows local districts to evaluate their total curriculum. A second program is a free scoring service provided by the state for use by districts that want to supplement local testing. Legislation adopted in the 1984 legislature mandates that competency testing in mathematics and reading in all grades be implemented by 1985 with additional tests in writing, spelling, and library skills to be developed the following year.

Nationally-Normed Tests

Comprehensive Tests of Basic Skills (CTBS)

(1981 Edition, Form U, Levels F, G, H, J)

Tests of Cognitive Skills

(Levels 2, 3, 4, 5 – Measure for four aptitudes: sequencing, making analogies, memorizing, verbal reasoning)

Mandate:	Legislative, 1978
Purpose:	District evaluation of curriculum, diagnostic data, national comparisons
Subjects:	Reading, writing, mathematics, spelling, reference skills; four aptitudes not mandated – included on the advisement of testing committee
Grades:	3, 5, 7, 10 (All students)

1982-83 Results:

Comprehensive Tests of Basic Skills (CTBS)

(All results are national percentiles of state mean achievement scores)

	Grade 3	*Grade 5*	*Grade 7*	*Grade 10*
Reading	59	51	54	44
Spelling	65	52	56	48
Language	70	52	57	52
Mathematics	64	54	53	45
Battery Total	66	51	54	50
Reference Skills	64	53	55	49
Science	57	51	54	53
Social Studies	64	53	59	61

Tests of Cognitive Skills

(Measures Four Aptitudes)

(Percentage of students scoring at or above the national median)

Grade 3	*Grade 5*	*Grade 7*	*Grade 10*
44	47	50	37

Trends in Student Achievement

The state reports that since the Comprehensive Tests of Basic Skills (CTBS) have been used for only two years, solid trend data are not available. They do, however, note slight increases in scores from 1982 to 1983.

CTBS Test Results for 1982-83

(Percentage of students scoring in stanines 4 through 9)*

	Reading	*Spelling*	*Language*	*Mathematics*	*Total Battery*	*Reference Skills*
			GRADE 3			
1982	79	82	83	85	83	82
1983	83	85	87	88	87	85
			GRADE 5			
1982	82	77	80	82	81	78
1983	83	78	82	83	83	80
			GRADE 7			
1982	82	79	80	81	81	81
1983	85	82	84	84	85	84
			GRADE 10			
1982	71	72	75	73	74	72
1983	74	75	78	75	76	76

*To report test scores in stanines all scores are placed on a scale having 9 divisions (stanines). Stanines 4 through 9 represent the average and above average ranges for student scores in Kentucky. The national expectations would be for 77 percent of the students to fall in these ranges.

Louisiana

The testing program in Louisiana consists of state-developed tests at the elementary and secondary levels. Results of elementary school testing are the principal criteria in promotion decisions, and are used to identify students for compensatory/remedial education programs. One additional grade of testing is to be added to the Basic Skills Testing Program each year until grades 2 through 12 are in the program.

State-Developed Criterion-Referenced Tests

Louisiana Basic Skills Testing Program (BST)

Mandate: Legislative, 1979
Purpose: Promotion decisions and identification of students for compensatory/remedial education programs
Subjects: Language arts (reading, writing); mathematics
Grades: 2, 3, 4 (All students)

1982-1983 Results:

Current Achievement Levels on Basic Skills Testing Program (BST)
(All scores are reported in average percent correct and are for regular education students only)

	Grade 2	*Grade 3*
Language Arts	93.9	89.6
Mathematics	92.3	87.8

For second-graders, the greatest difficulty in language arts was encountered in capitalization; phonetic analysis was the easiest. In mathematics, problem-solving was the most difficult; numeration, measurement, and estimation were the easiest.

For the third-graders, the most difficult competency area in language arts was language structure; spelling and vocabulary received the highest percent correct. In mathematics, the third-graders had the greatest difficulty with problem-solving, and relations and functions; the competency areas of geometry, fractions, and operations showed the highest percent correct.

Louisiana State Assessment Program

Mandate: Legislative, 1977
Purpose: Diagnostic information
Subjects: Reading, writing, mathematics
Grades: 7, 10 (All students)

1982-83 Results:

Louisiana State Assessment Tests
(All scores are reported in average percent correct)

GRADE 7		*GRADE 10*	
Reading	81.8	Reading	78.6
Phonetic Analysis	75.8	Vocabulary	68.6
Structural Analysis	91.4	Word Attack Skills	83.5
Comprehension	80.1	Comprehension	74.6
Study Skills	75.3	Study Skills	87.1
Writing	81.7	Writing	77.2
Capitalization	83.2	Capitalization	90.9
Punctuation	83.2	Punctuation	72.9
Spelling	83.7	Organization	77.2
Language Structure	78.8	Language Structure	67.7

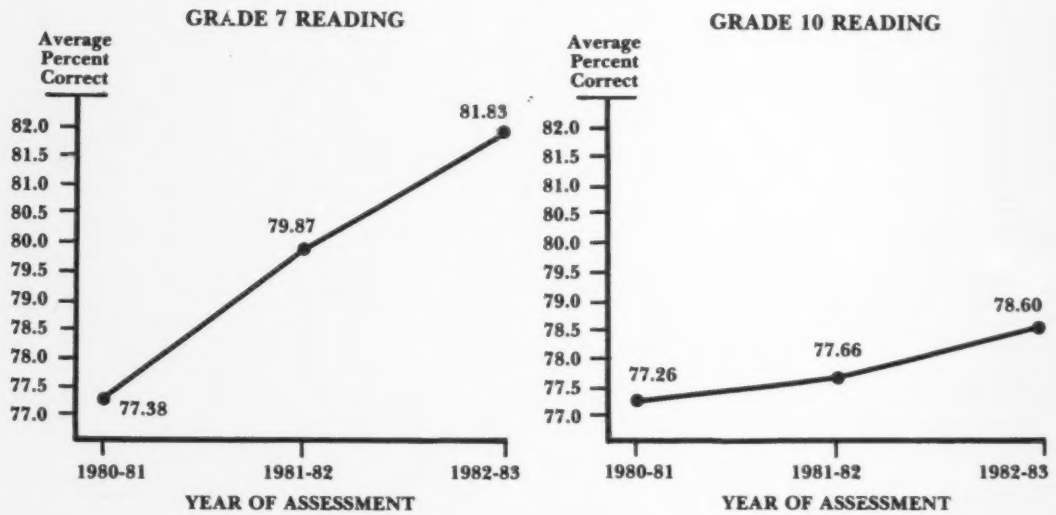
GRADE 7		*GRADE 10*	
Mathematics	68.1	Mathematics	71.3
Numeration	66.6	Numeration	79.9
Decimals & Operations	77.1	Decimals & Operations	78.3
Percent, Ratio-proportion	51.6	Percent, Ratio-proportion	62.8
Relations & Functions	80.3	Relations & Functions	76.6
Measurement & Estimation	82.2	Whole Number Operations	87.2
Problem-Solving	58.1	Geometry	65.7

Trends in Student Achievement

Trend data from two years of testing for basic skills of second-graders indicate that the students increased their language arts scores on all competencies. In mathematics, however, the students' scores decreased on their knowledge of sets, measurement and estimation, and problem-solving. The third-grade students were tested for the first time in 1982-83, therefore, no trend data are available.

At the secondary level, scores on the State Assessment Program in reading showed a steady increase over three years of testing for both grades seven and ten. In grade seven, the largest gain was in phonetic analysis (over 5 percent increase); in grade ten, the largest gain was in vocabulary (almost 2 percent).

LOUISIANA STATE ASSESSMENT PROGRAM



Because of test revision in the areas of writing and mathematics for the seventh and tenth grade tests, no direct comparisons can be made of this year's results with previous years, according to the State Department of Education. However, mathematics scores at the seventh grade level show a general upward movement, but math scores are down for tenth-graders over the last two years.

Maryland

The Maryland Educational Accountability Program includes norm-referenced testing at grades three, five, and eight; and criterion-referenced tests for basic skills at the secondary level.

State-Developed Criterion-Referenced Tests

Maryland Functional Tests of Reading, Writing, Mathematics, and Citizenship Skills

Mandate: Board of Education Resolution, 1979
Purpose: Diagnostic evaluation for individual students, classes, schools, and systems in tested areas. Level II of the Reading, Mathematics, and Writing Tests and the Citizenship Skills Tests also allow a certification decision for determining graduation from high school.
Subjects: Reading–now; mathematics, writing, and citizenship required for graduation beginning with Class of 1987
Grades: 9-12 (All students)

Results for 1983:

Maryland Functional Tests of Reading, Writing, Mathematics, and Citizenship Skills †

(First Testing of 9th-Graders)
(Reported as percentage of students passing the examination)

Spring, 1983	Writing	48 (No-fault administration)
Fall, 1983	Reading	93
Fall, 1983	Mathematics	61
	Citizenship	Students will take this test for the first time in the 9th or 10th grade during the Spring of 1984.

†Students have multiple opportunities to retake the test before high school graduation.

Nationally-Normed Tests

California Achievement Tests

(1977 Edition, Forms 13C, 15C, 18C)

Mandate: Board of Education Resolution, 1979
Purpose: Diagnostic evaluation of instructional programs
Subjects: Reading comprehension, language, mathematics are reported; complete range of subjects available
Grades: 3, 5, 8 (All students)

1982-83 Results:

California Achievement Tests (CAT)
(All scores are reported in grade equivalents*)

	Grade 3	*Grade 5*	*Grade 8*
Reading Comprehension	3.5 (3.3)	5.7 (5.5)	9.3 (8.4)
Language	3.7 (3.6)	6.6 (5.6)	9.4 (8.3)
Mathematics	3.4 (3.1)	5.6 (5.3)	9.0 (8.5)

*National averages are in parentheses.

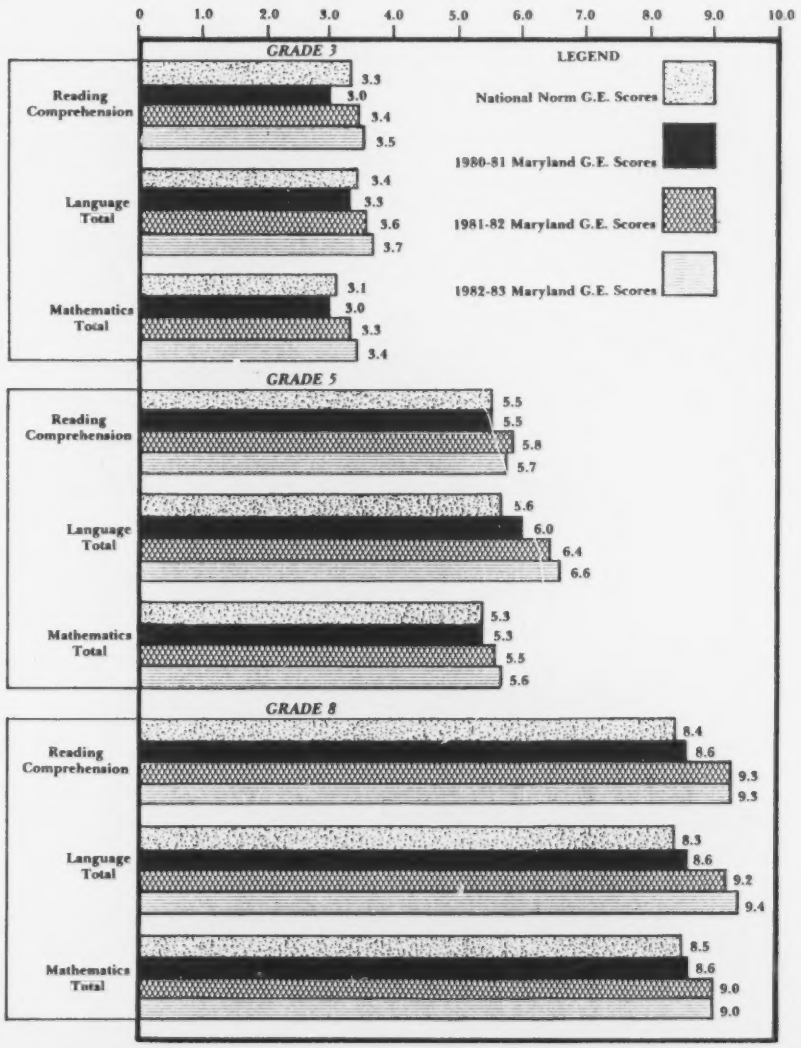
Trends in Student Achievement

Performance of the Maryland students on both the criterion-referenced high school graduation tests and the nationally-normed tests is improving. The three-year trend data for the nationally-normed tests are improving. The data indicate that the scores have remained the same or have increased for all grade levels, with the exception of reading comprehension in grade 5, which is still above the national norm (see figure).

Over the past four years, the passing rate for ninth-graders taking the Maryland Functional Reading Test, Level II for the first time ranged from 78 percent passing in 1980, to 84 percent in 1981, to 89 percent in 1982, to 93 percent in 1983.

Results for 1981-83:

California Achievement Tests
Comparisons to the National Norms
All scores reported in grade equivalents (G.E.)



Mississippi

Mississippi is currently using nationally-normed tests in its testing program. Changes are anticipated in the program because the Educational Reform Act of 1982 called on the State Board of Education to implement statewide competency testing in grades 3, 5, 8, and 11, and a functional literacy test in senior high grades.

Nationally-Normed Tests

California Achievement Tests (CAT)

(1977 Edition, Forms 14C,16C,18C, Academic Aptitude–levels 2, 3, 4 short form)

Mandate: Legislative, 1975
Purpose: To monitor pupil progress and to make state and local curriculum decisions
Subjects: Reading, mathematics, language, spelling, reference skills
Grades: 4, 6, 8 (All students)

Results for 1982-83:

California Achievement Tests (CAT)

(All scores are reported in percentile ranks for each grade for each subject)

	Grade 4	*Grade 6*	*Grade 8*
Reading Vocabulary	48	48	45
Reading Comprehension	49	50	45
Spelling	61	60	52
Language Mechanics	61	57	56
Language Expression	51	55	53
Mathematics Computation	61	62	54
Mathematics Concepts	49	50	48
Battery (total score)	53	53	49
Reference Skills	51	54	48

Trends in Student Achievement

The 1982-83 results of the California Achievement Tests in Mississippi indicate an upward trend in the achievement of students in all three grades. The total battery scores have increased 8 to 9 percentile points since 1980, when the current norming population was first used. Reading comprehension falls slightly below the average in grade four, and five points below the national average in grade eight. Mathematics computation is well above average in grades four and six, and slightly above average in grade eight. Mathematics concepts are near or at the average across all grades. The Mississippi Department of Education attributes the increase in scores to improved pupil test-taking skills and an increased teaching to skills measured in the test. In addition, the Department indicates that there has been a greater emphasis on following a plan of instruction statewide, as well as external pressures, which have made better test scores an important goal in the state.

Results of the California Achievement Tests*

(Percentile Ranks)

	Reading Vocabulary	*Reading Comprehension*	*Spelling*	*Language Mechanics*	*Language Expression*	*Math Comprehension*	*Math Concepts*	*Reference Skills*	*Total Battery*
				GRADE 4					
1979	42	44	42	51	44	50	37	—	—
1980	40	42	52	53	44	53	41	44	45
1981	41	43	55	54	46	55	44	46	46
1982	45	46	58	58	48	58	46	48	50
1983	48	49	61	61	51	61	49	51	53
				GRADE 6					
1979	33	40	36	48	40	34	35	—	—
1980	40	42	53	50	46	54	42	45	44
1981	43	45	54	50	49	56	44	47	47
1982	46	49	58	54	54	60	48	51	50
1983	48	50	60	57	55	62	50	54	53
				GRADE 8					
1979	25	34	33	38	38	36	32	—	—
1980	39	38	47	48	45	47	40	41	41
1981	41	40	49	50	47	49	42	43	43
1982	43	42	49	53	50	51	45	45	45
1983	45	45	52	56	53	54	48	48	49

*Test form and normative population changed in 1980.

North Carolina

The North Carolina testing program includes criterion-referenced testing at the elementary level and norm-referenced testing at the elementary and secondary levels through 1982-83. Beginning in 1983-84, students in grades one and two will take the California Achievement Tests, and sixth- and ninth-graders will take a writing test appropriate to their grade level. Current ninth-graders (Class of 1987) will be required to pass an appropriate writing test for high school graduation in addition to passing reading and mathematics tests.

State-Developed Criterion-Referenced Tests

Prescriptive Reading Inventory
(Levels II, B, 1976, 1972)

Diagnostic Mathematics Inventory
(Levels A, B, 1975)

Mandate: Legislative, 1977-1978
Purpose: To provide information about a student's performance on skills appropriate to a grade level
Subjects: Reading, mathematics
Grades: 1, 2 (All students)

Special Note: Administration of criterion-referenced tests for first- and second-graders ended in 1982-83.

Spring, 1983 Results:

Prescriptive Reading Inventory
Diagnostic Mathematics Inventory
All scores reported in grade equivalents
(Average student at the national level would perform at the grade level plus .7)

	Grade 1	*Grade 2*
Reading	1.9	3.4
Mathematics	2.4	3.5

Examining the percentage of students not achieving* in the subareas of the reading test showed that 47 percent of the first-graders did not achieve mastery of interpretive reading comprehension, while only 4 percent could not master oral language and attention skills. At the second grade level, 70 percent of the students did not master interpretive reading comprehension, with 14 percent of the students not mastering possessive forms and parts of speech.

In mathematics, at the first grade, 52 percent of the students did not master inverse and place value, while all students mastered matching and plane figures. In the second grade, 48 percent of the students did not achieve mastery on fractions; counting, matching, linear measuring, adding whole numbers, and problem-solving were not mastered by 1 percent of the students.

North Carolina Competency Test

Mandate: Legislative, 1977-1978
Purpose: High school graduation
Subjects: Mathematics, reading
Grades: 11 (12 for those not passing) (All students)

October, 1983 Results:

North Carolina Competency Test
(Percentage of 11th-graders passing first time tested)

Reading	93
Mathematics	90

*Three indicators of the strength of a student's performance in each area are reported–percent achieving, percent needing review, percent not achieving. In the above summary, the first two categories were combined and only the percentage of students not achieving were reported.

Nationally-Normed Tests

California Achievement Tests
(1977 Edition, Levels 13C, 16C, 18C)

Mandate: Legislative, 1977-1978
Purpose: To obtain general measures of performance; to compare groups of students
Subjects: Reading, language arts, mathematics, spelling
Grades: 3, 6, 9 (All students)

Special Note: First- and second-graders are administered norm-referenced tests beginning in 1983-1984 (Levels 11C and 12C of the California Achievement Tests).

1983 Results:

California Achievement Tests
All scores are reported in grade equivalents and percentiles†
(Average student at the national level would perform at the grade level plus .7 or 50th percentile)

	Grade 3		*Grade 6*		*Grade 9*	
	Grade Equivalents	*Percentile*	*Grade Equivalents*	*Percentile*	*Grade Equivalents*	*Percentile*
Reading	4.0	58	7.2	57	10.0	55
Spelling	4.7	67	8.5	67	—	63
Language	4.4	67	8.3	68	11.0	63
Mathematics	4.1	64	7.5	64	10.0	56
Total Battery	4.1	64	7.5	63	10.1	57

†Percentiles are based on distributions of individual scores rather than distributions of group averages.

Trends in Student Achievement

The students at all grade levels in North Carolina maintained or improved performance over the previous year on achievement tests and showed a steady increase of scores in all areas except 6th grade spelling, where scores have remained the same. The state also reports that there has been a relative decrease in the proportion of students having the lowest academic performance and an increase in those having the highest. The Department indicates that its data show that the education level of the best educated parent (as recorded by teachers) continues to reveal a strong influence on achievement averages. Trends in passing rates for first-time test-takers on the high school competency test for graduation show 1983 results (93 percent passed reading; 90 percent passed mathematics) to be similar to 1982 results–up from 1978 scores (90 percent passed reading; 85 percent passed mathematics).

North Carolina Achievement Results for the Years 1979-80 Through 1982-83 for Grades 1, 2, 3, 6, 9
(National average – grade level plus 7 months)

	Reading	*Mathematics*
	GRADE 1	
1979-80	1.8	2.2
1980-81	1.8	2.3
1981-82	1.9	2.4
1982-83	1.9	2.4
	GRADE 2	
1979-80	3.1	3.3
1980-81	3.3	3.4
1981-82	3.4	3.5
1982-83	3.4	3.5

	Reading	*Spelling*	*Language*	*Mathematics*
		GRADE 3		
1979-80	3.7	4.2	4.1	3.9
1980-81	3.9	4.4	4.0	4.0
1981-82	3.9	4.6	4.4	4.1
1982-83	4.0	4.7	4.4	4.1
		GRADE 6		
1979-80	6.7	8.5	7.4	6.9
1980-81	7.0	8.5	8.0	7.3
1981-82	7.2	8.5	8.2	7.5
1982-83	7.2	8.5	8.3	7.5
		GRADE 9		
1979-80	9.3	—	10.0	9.4
1980-81	9.8	—	10.4	9.9
1981-82	10.0	—	10.7	10.2
1982-83	10.0	—	11.0	10.0

South Carolina

Criterion- and norm-referenced testing at the elementary and secondary levels are included in the South Carolina testing program.

State-Developed Criterion-Referenced Tests

Cognitive Skills Assessment Battery

Mandate: Legislative, 1978
Purpose: Determine student readiness to enter the first grade
Subjects: Readiness skills prerequisite to reading, writing, and mathematics
Grades: First grade (All students)

Fall, 1983 Results:

The results of these tests indicate the readiness of a student to begin the formal school curriculum in the first grade. In the fall of 1983, 73 percent of the first-graders were classified as ready.

Basic Skills Tests

Mandate: Legislative, 1978
Purpose: Identification of student deficiencies for instructional improvement
Subjects: Reading, mathematics, plus writing for grades 6, 8, 11
Grades: 1, 2, 3, 6, 8, 11 (All students)

Spring, 1983 Results:

Basic Skills Tests

Percentage of Students Meeting the BSAP Standards*

Grades:	*1*	*2*	*3*	*6*	*8*	*11*
Mathematics	76	76	74	56	42	62
Reading	75	70	76	61	56	63
Writing	—	—	—	69	65	67

*Minimum standard on reading and mathematics is 700 on a scale that ranges from 200 to 1100. The minimum standard in writing is a 3 or above on a scale which ranges from 1 to 4. The score scales are not common across grades, therefore, caution should be exercised in making performance comparisons across grades.

Nationally-Normed Tests

Comprehensive Tests of Basic Skills (CTBS)

(1981 Edition, Form U, Levels F, H, and J)

Mandate: Legislative, 1977
Purpose: Monitor student achievement relative to the nation
Subjects: Reading, spelling, language, mathematics, reference skills, science, social studies
Grades: 4, 7, 10 (All students)

Spring, 1983 Results:

Comprehensive Tests of Basic Skills
Median National Percentiles[a]

	Grade 4	*Grade 7*	*Grade 10*
Reading	42	41	33
Spelling	43	49	43
Language	46	44	40
Mathematics	44	45	41
Battery Total	44	42	38
Reference Skills	50	42	32
Science	42	50	42
Social Studies	41	48	46

[a]All percentiles are rounded to nearest whole number

Trends in Student Achievement

The data for the past five years indicate that the percentage of students ready to enter the first grade (according to the test used) has steadily increased from 60 percent in fall 1979 to 73 percent in 1983 (see Table 1). In general, the Department of Education notes socioeconomic background of students is a factor which may give rise to conditions that affect test performance. Four years of data indicate that the weakest performance is exhibited by students who are eligible for free lunch. However, the data also reflect a substantial improvement in the free lunch group (an increase of 16 percentage points from fall 1979 to 1983 compared to an increase of approximately 13 percentage points for all students for the same period).

Comparisons of the data in reading and mathematics from the criterion-referenced tests indicate that, from spring 1981 to spring 1983, the percentage of students meeting the standards had generally increased at all grade levels with the exception of eighth grade mathematics, according to the Department of Education. The Department notes that the decline for eleventh grade mathematics in 1983 may be due to the fact that the data were estimated from sample data (see Table 2). Writing cannot be compared across years because of a change in test administration.

No trend data were available for the norm-referenced testing program.

Table 1
Cognitive Skills Assessment Battery
Percentage of All Students Ready to Enter First Grade from Fall 1979 to Fall 1983

1979	60
1980	64
1981	68
1982	71
1983	73

Table 2
Basic Skills Assessment Program
Percentage of Students Meeting the Standards[a] for Reading and Mathematics, Spring 1981 to Spring 1983

Grades:	*1*	*2*	*3*	*6*	*8*	*11*
Reading						
1981	70	62	67	55	51	—
1982	72	69	69	62	52	61[b]
1983	75	70	76	61	56	63
Mathematics						
1981	68	69	61	47	43	—
1982	68	64	68	51	41	64[b]
1983	76	76	74	56	42	62

[a]Standard–The minimum standard is set at a score of 700 on a scale that may range from 200 to 1100.
[b]The percentage meeting the Grade 11 standard in 1982 is an estimate based on sample data.

Tennessee

The state of Tennessee currently conducts three testing programs: the High School Proficiency Testing Program, the Tennessee Assessment of Basic Skills (TABS), and the Study of Education (SOE). Both the TABS and SOE are expected to terminate with the 1983-84 school year. They will be replaced by Basic Skills First criterion-referenced testing at grades 3, 6, and 8 and norm-referenced achievement testing at three grade levels (probably 2, 5, and 7).

State-Developed Criterion-Referenced Tests

High School Proficiency Test

Mandate: Legislative/State Board of Education
Purpose: Minimum competency for high school graduation
Subjects: Language arts (reading, language, spelling); mathematics
Grades: 9 (10-12 for those not passing in 9th grade) (All students)

1982-83 Results:

Tennessee Proficiency Test
(Percentage of Ninth-Grade Non-handicapped Students Passing)

Mathematics	87
Language Arts	77

Nationally-Normed Tests

Study of Education (SOE)
Metropolitan Achievement Tests
(1978 Edition, Form JS)
Stanford TASK 2

Mandate: State Board of Education
Purpose: Comparisons to nation
Subjects: Reading, mathematics, language, science, social studies
Grades: 3, 6, 8, 9, 12 (Grades may vary) (Sample of students)

Results for 1982-83 and 1983-84:

Metropolitan Achievement Tests (Reading, Mathematics, Language)
Stanford TASK 2 (Science, Social Studies – for grade 12 only)

Median Percentiles

	Grade 3	*Grade 6*	*Grade 8*	*Grade 12*	
	1982-83	*1982-83*	*1982-83*	*1982-83*	*1983-84*
Reading	50	56	50	46	52
Mathematics	60	54	54	46	42
Language	62	62	58	58	54
Science	54	52	50	37*	37*
Social Studies	54	54	52	41*	41*

*These percentiles are noticeably lower than the percentiles from the Metropolitan Tests. This is due in part to the difference in the national norms of these two tests, according to the State Department of Education.

Tennessee Assessment of Basic Skills (TABS)

(Local districts are allowed to select from a list of eight tests at grade 1, and five tests at grade 2.)

Mandate: State Board of Education
Purpose: Diagnosis and remediation
Subjects: Reading, mathematics
Grades: 1, 2 (All students)

Fall, 1983-84 Results:

Tennessee Assessment of Basic Skills (TABS)
Median Percentiles on Nationally-Normed Tests†
(Metropolitan Achievement Tests and California Achievement Tests are the most popular)

	Grade 1	*Grade 2*
Reading	59	47
Mathematics	43	47

†TABS combines scores on eight tests at grade 1 and five tests at grade 2.

Trends in Student Achievement

Results of the high school graduation test indicate that in mathematics the passage rate for non-handicapped high school students on their first try in the ninth grade on the mathematics portion has risen from 76 percent of the students in 1980-81 to the current 87 percent in 1982-83. According to the Department of Education, due to changes in the language arts section (until 1982-83 separate scores were reported for spelling, language, and reading), comparable passage rates prior to 1982-83 are not available. The norm-referenced tests show an upward trend in performance of students. Data from four years of testing (1980-81 to 1983-84) at grade 12 (using the Metropolitan Achievement Tests in reading, mathematics, and language) show an improvement in reading from the 42nd to the 52nd percentile over the four testings; in mathematics, a gain from the 36th to the 42nd percentile; and in language, from the 52nd percentile to the 54th percentile. The State Department indicates that scores on the TASK 2 on the 12th grade science and social studies tests are noticeably lower than those on the Metropolitan used in previous years. They attribute it in part to the difference in the norms of these two tests.

Texas

The statewide testing program in Texas consists of criterion-referenced tests in three grades (3, 5, and 9), with additional testing in grades 10, 11, and 12 for students who do not demonstrate mastery at the ninth grade level.

State-Developed Criterion-Referenced Tests

Texas Assessment of Basic Skills

Mandate: Legislative, 1979,1983
Purpose: To assess basic skills for individual student information and provide performance data aggregated by campus, district, and the state to include performance by demographic group and educational program
Subjects: Reading, mathematics, writing
Grades: 3, 5, 9 (All students)

1982-1983 Results:

Texas Assessment of Basic Skills

Reported as percentage of students mastering each competency.
(Mastery is attained by correctly answering at least 3 out of 4 items on each competency)

Grade 3

Reading	Percents of mastery ranged from 67 percent on identifying the main idea to 93 percent on recognizing words by sight and 96 percent on following written directions.
Mathematics	64 percent of the students mastered the competency of selecting units of measure; 71 percent could order whole numbers; 94 percent could multiply whole numbers.
Writing	Percents of mastery ranged from 69 percent on punctuation to 77 percent on sentence structure, and 96 percent on spelling. On the written composition (which is graded from 0 to 4–scores of 2, 3, or 4 indicate mastery), 95 percent of the students achieved mastery. On the legibility of handwriting, 98 percent were rated as acceptable.

Grade 5

Reading	61 percent of the students could identify main ideas, and 67 percent were able to distinguish fact from opinion and predict outcomes; 94 percent could use context clues.
Mathematics	65 percent of the students mastered the competency of solving word problems involving multiplication and division; 67 percent could interpret place value; 94 percent could add whole numbers; 96 percent were able to interpret graphs.
Writing	70 percent mastered punctuation, and 71 percent correct English usage; 97 percent mastered spelling. On the written composition, 97 percent had acceptable compositions, and 99 percent had acceptable handwriting.

Grade 9

Reading	67 percent of the students could use parts of a book, and 71 percent were able to make generalizations; 89 percent could use reference skills; 90 percent could follow written directions.
Mathematics	48 percent of the students could solve personal financial problems; 58 percent were able to use ratios, proportions, and percents; 96 percent could add and subtract whole numbers.
Writing	70 percent of the students mastered correct English usage; 92 percent mastered capitalization. On the written composition, 94 percent had acceptable compositions; 98 percent had acceptable handwriting.

Grade 12

(For students who had not mastered the objectives during testing at grades 9, 10, or 11.)

Reading	55 percent could use parts of a book; 59 percent could distinguish fact from opinion; 87 percent could use reference skills and follow written directions.
Mathematics	32 percent had mastered the use of fractions and mixed numbers; 40 percent could solve personal financial problems; 93 percent had mastered addition and subtraction of whole numbers.
Writing	74 percent had mastered punctuation; 91 percent could use commonly-used forms; 87 percent mastered capitalization; 92 percent had acceptable compositions; 96 percent had acceptable handwriting.

Trends in Student Achievement

The Texas Assessment of Basic Skills has been in operation for four years and the following trends are noted by the State Department of Education:

Student performance in grades 3, 5, and 9 show marked improvement from year to year in reading and mathematics.

Student performance in complex or higher-order skills remains lower than desired, but the 1983 results show marked improvement.

Student performance on the written composition is inconsistent over the four-year period, but 1983 results are higher.

The percentage of ninth-graders mastering all of the tests (mathematics, reading, and writing) is increasing – from 47 percent in 1980, to 57 percent in 1981, to 61 percent in 1982, and to 68 percent in 1983.

Improvement in performance of all students is attributed to improved instruction, according to the Department of Education.

Virginia

The Virginia program consists of norm-referenced tests at the elementary and secondary levels; criterion-referenced tests are used for individual diagnosis of children (Basic Learning Skills), and minimum competency tests for graduation from high school. Currently under development is a program called Standards of Learning, designed to replace the Basic Learning Skills, and, perhaps, the minimum competency tests now used at the high school level. The process involves various forms of assessment covering all subject areas in grades K-12. The reading and mathematics components are slated to be ready in 1984-85.

State-Developed Criterion-Referenced Tests

Basic Learning Skills Program

Mandated in 1976 by the legislature, these tests are designed to assess minimum skills in reading, communication, and mathematics. They are to be used for individual student diagnosis, and involve no aggregation of data.

High School Graduation Test

Mandate: Legislative, 1978
Purpose: Assess minimal skills for high school graduation; diagnosis
Subjects: Reading, mathematics
Grades: 10 (may be retaken in grades 11 and 12) (All students)

1982-83 Results:

The passing rate for first-time takers (spring, grade 10) showed that 94 percent of all students passed both the reading and mathematics portions of the test.

Nationally-Normed Tests

Science Research Associates (SRA) Achievement Battery and Ability Series

(1978 Edition, Form 1)

Mandate: Legislative/State Board of Education
Purpose: National comparisons, diagnosis, curriculum development
Subjects: Reading, language arts, mathematics, social studies, science
Grades: 4, 8, 11 (Sample)

1982-83 Results:

Science Research Associates Achievement Tests
Science Research Associates Ability Series
(Reported as percentiles)

	Grade 4	*Grade 8*	*Grade 11*
Reading	53	54	55
Language	56	55	55
Mathematics	56	66	60
Social Studies	53	60	50
Science	55	60	54
Ability	52	58	55

Trends in Student Achievement

According to the Department of Education, trend information from norm-referenced testing is limited because a new test was adopted in 1981-82, and linking old and new norms is tentative. The Department indicates, however, that the 1982-83 data are generally up over 1981-82 and extrapolated data indicate trends would have been extended had the 1978 edition been adopted earlier. For the high school graduation tests, passing rates for first-time takers (10th-graders) increased from 82 percent the first time the test was given in 1978 to the present 94 percent. The Department reports that passing rates have stabilized since 1981.

West Virginia

The West Virginia testing program includes nationally-normed tests for elementary and secondary students in the state. New instruments were recently selected for the program beginning with the 1984-85 school year.

Nationally-Normed Tests

Comprehensive Tests of Basic Skills (CTBS)

(1972-73 Edition, Form S)

Cognitive Ability Tests

(1970 Edition, Form 1)

Mandate: Legislative
Purpose: National comparisons and instructional review
Subjects: Reading, language, mathematics, reference skills, science, and social studies
Grades: 3, 6, 9, 11 (All students)

Results for 1982-83:

Comprehensive Tests of Basic Skills (CTBS)
(All scores are percentile ranks relative to the
1972-73 CTBS standardization sample)

	Grade 3	*Grade 6*	*Grade 9*	*Grade 11*
Reading	62	58	58	51
Language	61	61	61	54
Mathematics	58	56	54	49
Basic Skills	60	58	56	49
Science	61	59	58	54
Social Sciences	63	58	59	54

Trends in Student Achievement

The trend data for the last five years in West Virginia reflect an upward change in percentile ranks for all grades in all subject areas. Gains of 6 to 7 percentile points over the last five years are evident for the third-, sixth-, and ninth-graders. Gains for the 11th-graders are in the 3 to 4 point range. The State Department of Education suggests that changes in achievement are due to modification of curriculum to emphasize skills contained in the tests.

West Virginia Results on the Comprehensive Tests of Basic Skills and Cognitive Abilities Tests

(All scores reported as percentile ranks)

	Reading	*Language*	*Mathematics*	*Basic Skills*	*Science*	*Social Studies*
			GRADE 3			
1978-79	55	53	52	53	53	56
1979-80	58	57	55	56	56	59
1980-81	59	58	55	57	57	60
1981-82	60	60	58	59	60	61
1982-83	62	61	58	60	61	63
			GRADE 6			
1978-79	52	55	50	51	54	53
1979-80	55	57	52	54	55	55
1980-81	56	58	54	55	57	57
1981-82	58	60	56	58	59	58
1982-83	58	61	56	58	59	58
			GRADE 9			
1979-80	51	54	48	49	53	53
1980-81	53	55	49	50	54	54
1981-82	54	56	50	52	55	55
1982-83	56	59	53	52	56	57
1983-84	58	61	54	56	58	59
			GRADE 11			
1979-80	48	50	45	45	51	51
1980-81	49	52	46	46	52	52
1981-82	50	52	47	47	52	52
1982-83	51	54	49	49	53	53
1983-84	51	54	49	49	54	54

Student Achievement in Southern Colleges and Universities

There is a fundamental and almost universally accepted belief that many of the most important values of the collegiate experience cannot be measured. The wisdom of this seems as true now as ever and confidence in the inherent benefits of a college education may be as strong today as ever, but questions are increasingly being raised about the basic academic skills of today's college students and graduates.

The modest level of assessment of collegiate achievement is in sharp contrast to the extent of assessment in the public schools. The history of American higher education explains, in part, this contrast. Throughout most of this history, going to college was a privilege largely reserved for those few individuals who were expected to assume a leadership role in society–the brightest among the more affluent. Students were to proceed under the watchful eyes of the faculty–a community of scholars–who closely monitored programs of study and were called upon to attest to the students' achievement, as signified by the award of a degree. Colleges and universities judged their quality by their selectivity. Since the most selective institutions enrolled the brightest freshmen, it was assumed that the students who emerged four years later would necessarily be the best educated college graduates.

The widespread adoption of access as one of the primary goals of higher education has made selectivity less relevant. Greatly increased access, which began in the 1960s, carried with it the seeds of present concern about student performance and the need for improved ways to measure it.

Current Assessment Practices

Although systematic assessment of student achievement has less of a tradition in higher education than in elementary/secondary education, and while the use of student achievement to indicate college success is not widely accepted, there are a number of collegiate assessment programs operating today. These can be categorized in three major areas–intellectual development, career development, and personal development. From an educational standpoint, the primary area of achievement is intellectual development. What basic skills have students mastered? What levels of academic attainment have students reached in general and in specialized knowledge? What special aptitudes have students developed? These questions have gained importance as the quality of higher education has become an issue.

Interest is also growing in career and personal development. What levels of career aptitudes and awareness have students acquired? How many years of education do students finally complete? What are graduates' vocational achievements, such as level of responsibility, income, awards and special recognition? The personal development area covers self-concept, attitudes, beliefs, and value systems. How prepared for life and how suited for citizenship have students become? Both professional educators and citizens

might agree wholeheartedly that this latter area is critical to the preservation and support of our democratic society, but they might also agree that it is very difficult–if not impossible–to measure.

There are assessments which measure aptitudes and achievement of first-time students, those which mark progress made by continuing students during the college-going period, and those which measure graduating students' achievement. Assessment may be required or conducted on a systemwide basis or employed by institutions on a discretionary basis. Assessment results may be comparable among states and institutions or they may be one-of-a-kind, with no comparability to others. Figure 1 illustrates these classifications and lists some assessments used in the South.

This brief synopsis of major developments in the SREB states reflects the general views of state higher education agency staff regarding the extent of assessment practices in their states, as well as interpretation by SREB staff. This is a topic on which many state educational leaders are inclined to be cautious. Some are frankly concerned about misuse of assessment results; others are skeptical of their ultimate potential in assuring quality. However, most share an interest in more information and discussion about the extent of assessment practices now in use. Many indicate that assessments of student learning contribute to promoting improved student achievement, curriculum reform, and better instructional practices–in short, educational progress.

Assessment of Intellectual Development

First-Time Students. By far the most widely practiced assessments related to higher education in the nation and in the South are measures of first-time college students' intellectual development. Nearly all Southern colleges and universities require first-time students to submit Scholastic Aptitude Test (SAT) or American College Test (ACT) scores. These are not measures of what students learn in college, but are designed to indicate intellectual aptitudes and achievement before entering. Individual scores are used to evaluate prospective students for admission and to aid in academic placement upon entry. While perhaps less of a factor in admission during the Seventies and Eighties, with declining rates of enrollment growth and lowered admissions standards, norms from these tests do reveal something about the educational preparation of college-bound students. They do not adequately gauge educational progress at the elementary/secondary level across the board, because they apply solely to college-bound students.

In about half of the states, these "entrance exam" results are disseminated on a statewide basis. Several have special programs to make use of the results. For example, Scholastic Aptitude Test (SAT) freshman norms are distributed throughout the University System of Georgia and, in a "high school feedback" program, each high school receives a status report, including SAT and early course performance information, on its former students.

Additional assessments using comparable tests, such as the Test of Standard Written English (TSWE), and the California Achievement Tests (CAT) math section, are also required in many states for students whose ACT or SAT scores are below a certain level. Another widely practiced assessment is

Figure 1

MAJOR HIGHER EDUCATION STUDENT ASSESSMENTS IN THE SREB STATES

TRAITS	LEVEL	COMPARABLE	NON-COMPARABLE
I. INTELLECTUAL DEVELOPMENT Academic Ability General Knowledge Specialized Knowledge Basic Skills Special Aptitudes	A. First-Time Students	ACT, APP, CLEP, SAT, TOEFL, TSWE	Placement and Basic Skills Tests
	B. Continuing Students	CAT, COMP, NTE, PEP, PPST	"Rising Junior" Exams
	C. Graduating Students	DAT, COMP, GRE, LSAT, MAT, MCAT, NTE, PEP	Class Rank, Grade Point Average, Practicums, Licensing Exams, Senior Exams
II. CAREER DEVELOPMENT Career Aptitudes and Awareness Level of Educational Attainment Vocational Achievement Level of Responsibility Income Awards and Special Recognition	A. First-Time Students	Aptitude Tests Career Guidance Tests TEX-SIS	
	B. Continuing Students	Aptitude Tests Career Guidance Tests	
	C. Graduating Students	CIRP Surveys SOIS TEX-SIS	Follow-up Studies Licensing Exams
III. PERSONAL DEVELOPMENT Self-Concept Values Attitudes Beliefs Drive for Achievement Satisfaction with College Personal Habits Avocations Mental Health Citizenship Interpersonal Relations	A. First-Time Students	CIRP Surveys ESS SAT and ACT Profiles SOIS TEX-SIS	
	B. Continuing Students	CIRP Surveys CSEQ ESS SOIS	
	C. Graduating Students	CIRP Surveys ESS SOIS TEX-SIS	Follow-up Studies

KEY:

ACT American College Test
APP Advanced Placement Program
CAT California Achievement Tests
CIRP Cooperative Institutional Research Program
CLEP College Level Examination Program
COMP College Outcomes Measurement Program
CSEQ College Student Experiences Questionnaire
DAT Dental Admission Test
ESS Evaluation Survey Service
GRE Graduate Record Examinations
LSAT Legal Scholastic Aptitude Test
MAT Miller Analogies Test
MCAT Medical College Admission Test
NTE National Teacher Examinations
PEP Proficiencies Examination Program
PPST Pre-Professional Skills Test
SAT Scholastic Aptitude Test
SOIS Student Outcomes Information Services
TEX-SIS Texas Student Information System
TOEFL Test of English as a Foreign Language
TSWE Test of Standard Written English

evaluation of first-time students to determine if they should be awarded college credit for knowledge already attained (e.g., College Level Examination Program–CLEP). Also, the Test of English as a Foreign Language (TOEFL) is widely used to evaluate foreign students for admission and academic placement.

By June 30, 1984, legislation requires that Florida choose "common placement tests and testing procedures which will assess the basic computation and communication skills . . ." of all students entering college. Cutoff scores will be set to determine which students require remediation; comparable or non-comparable tests may be chosen. Some years ago, the University System of Georgia developed a basic skills testing program for this purpose. In addition to these types of testing requirements, several states are considering or requiring that first-time students complete a minimum number of prescribed secondary units for college entry.

Continuing Students. More and more assessment of student progress is being conducted, especially for entrance to teacher education, nursing, and other specialized programs. Most employ comparable testing instruments, such as portions of the National Teacher Examinations (NTE), the College Outcomes Measurement Program (COMP), the Proficiencies Examination Program (PEP), the Pre-Professional Skills Test (PPST), and the California Achievement Tests (CAT). Most of the SREB states use statewide entrance examinations or scores on the ACT or SAT to determine eligibility to enter teacher education programs. Many states also require a minimum grade point average, in addition to testing. Two states, Virginia and Arkansas, have recommended to higher education institutions that scores from standardized tests be used. Another state, Kentucky, requires that institutions use a test, but does not prescribe which test or the cutoff score to be applied.

A second widely noted development in recent years is adoption of so-called "rising junior" tests. Florida and Georgia have received national attention for being among the first states to develop such assessments. The Florida "rising junior" test–College Level Academic Skills Test (CLAST)–was established by legislative action and has been developed by the Florida Department of Education to assess continuing students' communication and computation skills. The test is based on community college and state university faculty consensus on the skills appropriate for all students moving to the junior level. Since October 1982, the Department has administered the test on a trial basis and has established the passing scores in each area. Thus far, the results have been used only for counseling students and for curriculum improvement. However, the legislation states that, beginning August 1, 1984, all students in Florida's community colleges and state universities will be required to have CLAST passing scores to be eligible to receive an associate degree or to be given upper-division standing. The requirement applies to transfer students as well, and in 1985-86, students enrolled in Florida's independent institutions must participate, if they receive state financial aid.

The communication areas covered by CLAST include reading, writing, speaking, and listening. Computation includes algorithms, concepts,

generalizations, and problem-solving. Students have three and a half hours to complete the exam and may take it as many times as necessary. If the 1984-85 cutoff scores had been applied in administration of the trial tests, about 70 to 75 percent of all students would have passed on their first try. The passing rate for black students, on the first attempt, would have been about one-half that for white students. On the latest test administration–the last before a passing score will be required–the scores were higher; more than 85 percent of the students would have passed, based on the cutoff scores to go into effect next fall. The passing scores are scheduled to be raised in 1986 and 1989 to cutoff levels significantly higher than the 1984-85 requirements.

Georgia instituted its Regents' Testing Program 11 years ago. Also a "rising junior" test, it is intended to assure that all graduating students have "certain minimum skills in reading and writing." Passing the Regents' Test has been a requirement for an associate or bachelor's degree since 1973. The two-hour examination involves a reading test and essay writing. Faculty grade the tests under guidelines provided by the Regents; each essay is graded by three raters working independently. Institutions receive reports on the performance of their students and comparisons of their students' performance with that of students at similar Georgia institutions. When the test is given to rising juniors for the first time each year, about 75 percent pass the reading test and about 66 percent pass the writing examination. Because remedial courses are available–or required for students who have 75 hours of degree credit and have not passed–and students are allowed to take the test as many times as necessary, the final passing rate is almost 100 percent. Between 1973–when the test was first required for graduation–and 1982, the University System of Georgia awarded more than 135,000 degrees, and only 400 students who completed the course requirements for a four-year degree had not passed the Regents' Test.

California is presently the only other state with a statewide "rising junior" examination, but nearly all public universities in Mississippi have implemented English proficiency exams for students moving to the junior level. All of these "rising junior" tests are essentially minimum competency examinations and are intended to ensure or demonstrate certain essential skills for college students. Like the high school minimum competency graduation tests, they do not address "high quality," but in both cases, the difference between the initial and final passing rates for a class reflects improvement by students whose performance has been marginal.

Graduating Students. Only one state higher education agency in the South reported a statewide assessment of graduating students, using a comparable test. Tennessee administers the College Outcomes Measurement Program (COMP) to a sample of four-year college graduates. However, by the end of 1984 half of the SREB states–Arkansas, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia–will use the National Teacher Examinations (NTE) for graduates seeking teacher certification. Each of the states using NTE sets its own passing score for certification. Virtually all other SREB states have developed teacher certification tests or are in the process of putting them in place. The passing rates on the NTE and on the state tests are similar. Regionwide, about 80 percent of the graduates

taking the tests pass on their first attempt; retesting raises the figure closer to 90 percent. In every state, black students are failing the tests at rates several times higher than those for white students. While the passing score varies from state to state, in general it is set at a very low level–far below the national norm; the idea is to assure minimum competency.

Other assessments of graduating students include the widespread requirement of the Graduate Record Examinations (GRE) or the Miller Analogies Test (MAT) for baccalaureate degree holders seeking entrance to graduate school. Some undergraduate departments are experimenting with the GRE, with both locally and externally developed senior exams, with peer evaluations, or with COMP, as a requirement for all their graduating students. Some states–Alabama, Florida, Georgia (and Tennessee in 1986)–are using certification test passing rates for graduates of teacher education programs for making decisions about continuing state approval of programs. State higher education agencies have also used nursing licensing examinations in making decisions about whether to continue state approval for nursing programs.

Performance of students on other licensing examinations has usually not received close attention from institutions or state higher education agencies. In some cases, variables or circumstances make the results not very useful for assessing the academic preparation of students taking the examinations. The national standardized examination for certified public accountants is a good example of this. The overall passing rate on the certified public accountant examination typically averages only around 20 percent. This is, of course, a rigorous examination but, in addition, 1) candidates are classified as not passing if all parts of the exam are not passed, if all parts for which a candidate is eligible are not taken, or if candidates are not eligible for all parts of the exam; 2) some candidates may be eligible for parts of the exam with no more than two years of college; and 3) students are encouraged to take the exam for practice to help them prepare for a subsequent test. Factors of this type are less operative for other professional examinations. Some professional schools or departments within universities do monitor how their students perform on licensing examinations. With the growing interest in student performance, more attention to the results of these important examinations might be expected.

Assessment of Career and Personal Development

The assessment of career and personal development occurs almost exclusively at institutional initiative, and SAT and ACT profiles–which include student demographic and interest information as well as test scores–are widely used. A number of standardized aptitude and career guidance tests are used by colleges and universities, sometimes as part of the admissions process. Counseling and guidance centers operate in almost all Southern institutions of higher education, with a broad variety of assessments available. Follow-up studies are conducted widely–although relatively few are systemwide–to assess the career development of graduates. Few of these follow-ups employ comparable questionnaires; however, comparisons can be made when the

Student Outcomes Information Service (SOIS) and Evaluation Survey Service (ESS) are used.

Other Major Assessment-Related Activities

Florida has a Progress Toward Educational Excellence program–the "indicators project." In this project, each university president submits plans for improving educational excellence according to the official indicators of progress adopted by the State Board–some of which are based on assessments of student achievement. Annual reports at the institutional and state university system levels will evaluate progress.

Student assessment is partly responsible for decisions each year to allocate several million dollars to Tennessee higher education institutions. The Tennessee Performance Funding Project permits a college or university to earn an extra amount of state funds–up to two percent of its budget–by meeting performance criteria. How much an institution earns depends on its performance, based on these factors: 1) number of academic programs accredited, such as law, engineering, education, and business; 2) performance of graduates on a measure of outcomes in general education, such as ability to communicate, analyze, and evaluate, and familiarity with major modes of intellectual inquiry; 3) performance of graduates on tests in their major fields (e.g., nursing exams, engineering exams); 4) evaluation of programs and services by enrolled students, recent alumni, and community/employer representatives, principally through follow-up questionnaires; and 5) peer evaluation of institutional programs. Several of these factors are based on student achievement.

Tennessee has new state-imposed measures of performance in higher education that are a part of its Comprehensive Education Reform Act of 1984. (These measures are not a part of the Performance Funding Project.) The Comprehensive Education Reform Act pertained primarily to the public schools, but also contained significant funding increases for higher education, including new initiatives. The Act spelled out 15 goals for improvement of higher education during the next five years. Several of these call for evidence of increased student achievement, such as:

> An improvement in the average NTE scores of students enrolled in public university teacher preparation programs;
>
> An improvement in standardized examination scores of graduating seniors at public universities;
>
> An increase in the number of students from public universities who pass all parts of professional licensing examinations on the first attempt in the following fields: engineering, medicine, law, nursing, elementary education, and secondary education;
>
> An improvement in test scores of students entering graduate schools within public universities, as measured by such national examinations as the GRE;
>
> An increase in the measured knowledge of graduates of public university graduate and professional programs.

Other goals have to do with input, support received from non-state sources, and the reduction of remedial courses in higher education. The Tennessee Higher Education Commission is charged with developing quantitative measures of these goals.

In addition to specific state and institutional actions, the general subject of student assessment has received regionwide attention. At the December 1983 College Delegate Assembly of the Southern Association of Colleges and Schools (SACS) a proposed revision of accreditation standards was presented for approval. One highly controversial section on institutional effectiveness called for institutions to use "outcomes assessment"–including student assessment–in institutional planning and evaluation. The consideration of this section was tabled and referred to a committee for further study. The remainder of the proposed revision was approved in principle. By June 1984, the edited proposal, minus the tabled section, is to be distributed for review, and action is expected at the College Delegate Assembly meeting in December 1984. It is possible that the committee considering the institutional effectiveness section also may have a report or recommendations ready for the December 1984 Assembly meeting.

Summary and Conclusions

While the range and scope of student assessments in higher education are less than in elementary/secondary education, some of them figure significantly in important decisions affecting institutions, students, and society at large. The most serious decisions are in regard to who will attend which institutions of higher learning, who will be allowed to prepare for specific professions, who will be certified in the professions and, in some cases, who will be allowed to receive college degrees, and which institutions will receive extra funding or state approval for certain programs. Today there is interest in a new form of accountability for higher education–accountability on the basis of the demonstrated achievement of students, not just on financial criteria; and quality judgments on the basis of student academic success, not just on the basis of selectivity.

Because of the historical reliance on selective admissions as a guarantor of quality in higher education, formal assessment of student achievement at the collegiate level still occurs primarily through college admissions tests. While these are not assessments of college student achievement–they are generally taken during the senior year of high school–the public associates these assessments with college students. True college-level assessment of students occurs basically in three ways: 1) to serve special categories of students, such as those seeking credit for particular parts of a curriculum, e.g., college credit for knowledge already acquired (CLEP), or entrance into specific programs (NTE or GRE); 2) to serve a "gate keeping" function aimed at certifying minimum academic accomplishment, e.g., certification tests for graduates seeking to teach, or "rising junior" tests for college sophomores; 3) to evaluate specific programs, e.g., teacher education or nursing, for decisions about state approval or authorization; and 4) at a more or less

experimental level, to monitor improvements in student performance and educational progress.

The college-level assessments which will affect the most students in the South in 1984-85 are the "rising junior" examinations. A total of approximately 75,000 college sophomores in Florida and Georgia will take these examinations next year. An estimated 15,000 will fail the tests on their first attempt. However, based on the 11-year history of the Georgia Regents' Test, and what the passing rates for high school minimum competency graduation tests have shown, it is likely that nearly all of the class of 1986 will eventually meet the requirements. The term "minimum competency" is not usually applied to these "rising junior" exams, but that is essentially what these tests are.

Professional licensing examinations affect another large segment of college students in a very direct way, the largest group being teacher candidates. All of the SREB states require, or are putting in place, tests for teacher certification. These tests are not conducted by higher education institutions but by independent regulatory boards. However, college graduates seeking employment certification must achieve a passing score to teach, and some states are using licensing exam results to make decisions about continuing state approval for the collegiate programs from which the students graduate. The growing interest in student performance may prompt more of this.

Enrollment-driven funding, which largely shapes the higher education budgets in most states, is perceived to provide no direct incentives to upgrade student performance and other quality improvement efforts. In fact, some observers contend that enrollment-driven formulas discourage many types of quality improvements that could have the effect of reducing enrollments and, therefore, dollars. This perception led Tennessee to begin its Performance Funding Project based on the philosophy that a state's funding system for higher education should reward educational progress–in part measured by student performance. While the five-year-old Tennessee project has not revolutionized the way higher education is funded in Tennessee, or in other states, it is proving to be more than an experiment–the project determines the allocation of several million dollars each year.

The opening section of this report documents educational progress at the elementary/secondary level, including new high school graduation and college admissions standards. Efforts to bolster quality and activities to promote progress in the collegiate sector, such as those reviewed in this section, have been noted positively by staff of the American Council on Education. The conclusions of the Council researchers deserve serious consideration, as states and institutions determine ways of using student achievement information to improve quality and promote educational progress:

(1) All colleges and universities should reexamine their policies and procedures for the award of the degree, focusing especially on the certification of basic academic competencies.

(2) Institutions should not rely solely on strengthening admissions requirements in order to advance student competencies. What

is done to and for college students is as important as the skills with which they enter.

(3) The Council on Postsecondary Accreditation (COPA) should be encouraged to give special attention to institutional policies, procedures, and requirements for the award of the college degree, again focusing on the basic academic competencies.

(4) Discussion should be conducted in appropriate forums on whether national examinations to measure basic academic competencies should be developed to help preserve the integrity of the college degree.

(5) In order to be fair to disadvantaged students, while also raising general expectations, passing scores on any proficiency examinations should be raised gradually. Similarly, the accomplishments of those students with high past academic performance but low test-taking ability should also be recognized.

Bennett and Associates. "Academic Progression Tests for Undergraduates: Recent Developments," *Educational Record*, ACE, Winter 1984, p. 48